

REMARKS

Claims 1-33 remain pending in this application. Each of the pending claims is believed to define an invention that is novel and unobvious over the cited references. Favorable reconsideration of this case is respectfully requested.

According to embodiments of the present invention, an original camera motion layer is comprised of a composite of background data from a plurality of frames in the original video sequence. That is, the plurality of frames from the original video sequence are subsumed into the camera motion layer. The frames do not individually exist within the camera motion layer. The camera motion layer is edited and combined with the fixed frame layer to produce a modified video sequence. The modified video sequence is created without any of the frames of the original video sequence being edited.

Claims 1-2, 22, 25-27 and 29 are rejected under 35 U.S.C. 103 as being unpatentable over Bergen et al. in view of Maeda.

The Office Action fails to establish a prima facie case of obviousness as the level of ordinary skill in the art has not been resolved as is required, please see MPEP, Section 2141, Graham v. John Deere, 383 U.S.1(1966); and KSR International Co. v. Teleflex Inc., 182 USPQ, 2nd 1385 (2007). Resolving the level of skill in the art is a requirement of establishing a prima facie case of obviousness, and is especially pertinent in the present case.

The cited Bergen reference relates to a method and apparatus for efficiently storing and accessing video information, please see column 1, lines 7-10. This is done by indexing the video information. Bergen describes dividing a continuous video stream into a plurality of video streams. At least one of the plurality of video streams is divided into one or more layers. The layers are then represented as a mosaic. The mosaic representations may then be indexed and stored in a database, please see column 1, lines 41-52.

As part of the indexing, attributes regarding the frames of the video stream are determined. The video stream is processed to identify intra-scene and inter-scene attributes and group inter-scene attributes, col. 9, lines 13-55. The set of attributes associated with a particular frame may be classified in a number of ways. For example, frame-specific attributes are those attributes of a video information frame that relate to the arrangement of video information within the particular frame. Examples of frame-specific attributes include distributions of luminance, chrominance, texture and shape; location coordinates of objects; textual and visual annotations and descriptions and the like. Segment-specific attributes are those attributes of a video information frame that relate to the arrangement of video information within a segment, or scene, comprising a plurality of video information frames. Examples of segment-specific attributes include the frame number of a particular video frame in a sequence of video frames, identification of a scene that the particular video frame is part of, geographic location and temporal information relating to the scene, static and dynamic geometric information relating to camera location(s) and usage (e.g., parallax information), identification of actors and objects within the scene, and the like, col. 10, lines 6-30.

Inter-scene or inter-segment (i.e., scene-to-scene or segment-to-segment) attributes may also be calculated to enable grouping or associating scenes or segments sharing one or more attributes. For example, two segments sharing, e.g., very similar background textures may comprise temporally shifted versions of the same scene. For example, a particular camera angle generates a scene having similar textural features over time (e.g., a top-down view of a football game). A request for all scenes sharing the common textural feature may be satisfied by retrieving the video images associated with scenes meeting the parameters of the textural query. The above-described attribute classifications are used to generate a video information database 125, col. 10, lines 41-55

Any editing of the video in the system of Bergen would destroy the carefully created relationships and groupings required for indexing the video and efficiently accessing the video. For example, assume a video frame is indexed as having a particular textural feature. If the frame is edited to eliminate or modify this feature, the frame is not properly indexed. The frame's classification is no longer be valid. The frame would be returned as a result of a query for the textural feature, when the frame does not in fact include that feature. Modifying Berger to include

editing any “camera motion layer” would render Bergen unsatisfactory for its intended purpose, efficiently representing and accessing video information. If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP, Section 2143.01; and *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

Furthermore, it is clear from an examination of Bergen that editing is not described. The object of Bergen is video databasing and video indexing, not editing, please see column 1, lines 7-10. These objects are achieved via the use of mosaic generation. Persons skilled in the art of mosaic generation are not necessarily skilled in such mathematics techniques as frame alignment, frame-to-frame motion estimation, pixel statistical modeling and other image processing techniques. A person of ordinary skill in the art of mosaic generation may be familiar with such commercial mosaic generation software such Photo Vista Panorama or Adobe Photo Shop.

In comparison, the present invention, as well as Maeda, relates to the field of video editing systems. Persons of ordinary skill in the art of video editing systems are familiar with technical aspects of audio/video streams and creative aspects of artistic modification. Tools used by persons of ordinary skill in the art of video editing may be familiar with such commercial video editing software such as Adobe Premier or Final Cut Probe. A person of ordinary skill in the art of either the art of mosaic generation or video editing is not familiar with the tools and techniques of one or ordinary skill in the other art.

Accordingly, one of ordinary skill in the art of video editing would not find it obvious to combine the techniques of Maeda with the technique of Bergen and the proposed combination of Bergen and Maeda does not rendered the claimed invention obvious. Therefore, the withdrawal of this rejection is respectfully requested.

Claims 3-5 and 23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Bergen in view of Maeda and further in view of Jasinski.

Claims 6, 13 and 15 have been rejected under 35 U.S.C. 103 as being unpatentable over Bergen and Maeda further in view of Foreman et al.

Claims 7-12, 14, 16-21, 24, 28 and 30-33 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Bergen in view of Maeda and further in view of Petelycky.

The above claims are patentable over Maeda and Bergen for at least the reasons discussed above. Additionally, neither Jasinski nor Foreman or Petelycky supplement Maeda nor Bergen to teach or suggest the claimed invention as was agreed during the interview. Accordingly, the withdrawal of these rejection is respectfully requested.

In view of the above, applicant believes the pending application is in condition for allowance.

While Applicants do not necessarily concur with the Office Action's characterizations of the claims and/or the references with regard to other claimed features, Applicants choose not to discuss each such feature. Consequently, the lack of explicit discussion is not to be understood as indicating tacit agreement with such characterizations.

If the Examiner is of the opinion that the prosecution of this application would be advanced by a personal interview, the Examiner is invited to telephone undersigned counsel to arrange for such an interview.

The Commissioner is authorized to charge any fee necessitated by this Amendment to our Deposit Account No. 22-0261.

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In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

By 
Jeffri A. Kaminski

Registration No.: 42,709
VENABLE LLP
P.O. Box 34385
Washington, DC 20043-9998
(202) 344-4000
(202) 344-8300 (Fax)
Attorney/Agent For Applicant